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GLOSSARY

CAA	Clean Air Act
D.C. Area	Washington, D.C. Metropolitan Area
EPA	Environmental Protection Agency
1991 Guidance	"Guideline for Regulatory Application of the Urban Airshed Model" (July 1991)
1996 Guidance	"Guidance on the Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS" (June, 1996)
JA	Joint Appendix
NAAQS	National Ambient Air Quality Standards
Pet'r Br.	Petitioner's Brief
ppb	parts per billion
ppm	parts per million
RACM	reasonable available control measures
ROP	rate of progress
RRF	relative reduction factor
SIP	State Implementation Plan
the States	District of Columbia and several counties each in the State of Maryland and Commonwealth of Virginia (comprising the Washington, D.C. Metropolitan Area)

TSD	"Technical Support Document for the One-Hour Ozone Attainment Demonstrations submitted by the State of Maryland, Commonwealth of Virginia and the District of Columbia for the Metropolitan Washington, D.C. Ozone Nonattainment Area"
UAM	Urban Airshed Model

STATEMENT OF JURISDICTION

This Court has jurisdiction under section 307(b)(1) of the Clean Air Act ("CAA" or "Act"), 42 U.S.C. § 7607(b), to review two final actions of the Environmental Protection Agency ("EPA"): The "bump-up" action, 68 Fed. Reg. 3410 (Jan. 24, 2003) [JA XX] and the "conditional approval" action, 68 Fed Reg. 19,106 (Apr. 17, 2003) [JA XX]. Petitioner timely filed petitions for review of EPA's final actions in this Court on March 24, 2003, and April 25, 2003, respectively, and in the Court of Appeals for the Fourth Circuit on March 25, 2003, and May 27, 2003, respectively. All cases were consolidated in this Court for briefing and argument by order dated May 6, 2003.

STATUTES AND REGULATIONS

Statutory and regulatory provisions are contained in the addendum to Petitioners' brief ("Pet'r Br.") and in the Joint Appendix ("JA").

STATEMENT OF ISSUES

I. Whether EPA's *conditional* approval of the revisions to the Washington D.C. Metropolitan Area ("D.C. Area" or "Area")[1/] attainment demonstration and rate of progress ("ROP") State Implementation Plans ("SIPs") pursuant to section

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[1/] The D.C. Area comprises the District of Columbia and several counties each in Maryland and Virginia ("the States"). 40 C.F.R. §§ 81.309, 81.321 and 81.347, 68 Fed. Reg. at 3411/2 [JA XX].

110(k)(4) of the CAA, 42 U.S.C. § 7410(k)(4), was reasonable when the SIPs contained the majority of required elements (including the control strategy and demonstration of attainment by the statutory deadline), and the States provided commitments to adopt specific enforceable measures within one year to comply with the few remaining requirements for full approval of the SIPs.

II. Whether EPA's conditional approval of the attainment demonstration, which is based on photochemical grid modeling and contains supplemental analyses based on the weight of evidence, was consistent with the statute, regulations, and EPA guidances.

III. Whether EPA's conditional approval of the ROP plan for the 1996-1999 period was proper when the plan was based on the computer model applicable at the time of the modeling.

IV. Whether EPA properly allowed the States a reasonable period of time, after the Area was bumped-up from "serious" to "severe" nonattainment classification, to submit revised SIPs to comply with the Act's severe nonattainment area requirements.

STATEMENT OF THE CASE

In Sierra Club v. Whitman, 294 F.3d 155 (D.C. Cir. 2002) ("Sierra Club I"), this Court vacated EPA's approval of the serious area attainment demonstration

and ROP SIP revisions[2/] submitted by the States, and remanded the SIPs to EPA for further action. On January 24, 2003, EPA "bumped-up" the D.C. Area from a "serious" to "severe" nonattainment classification and provided the States until March 1, 2004 to submit revised SIPs to comply with the newly applicable severe nonattainment area requirements and to remedy the deficiencies identified by this Court in Sierra Club I. Thereafter, the States submitted letters to EPA in which they committed to adopt specific enforceable measures necessary to comply with the severe nonattainment area requirements and to cure the other deficiencies [JA XX, XX, XX]. Based on the States' newly submitted commitments, EPA conditionally approved the SIPs on April 17, 2003. Sierra Club challenges the conditional approval and the attainment demonstration upon which it is based.

I. Statutory Background

The CAA, enacted in 1970 and extensively amended in 1977 and 1990, establishes a comprehensive program for controlling and improving the nation's air quality through a combination of state and federal regulation. Under Title I of the Act, EPA is charged with identifying air pollutants that endanger the public health and welfare, and with formulation of the National Ambient Air Quality Standards

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[2/] EPA's action in this case was on *revisions* to the attainment demonstration and ROP SIPs that had been previously submitted by the States and approved by EPA. For brevity, we will refer to the SIP revisions as SIPs.

("NAAQS") that establish maximum permissible concentrations of those pollutants in the ambient air. 42 U.S.C. §§ 7408-7409.

EPA has established NAAQS for six pollutants, including ozone. See 40 C.F.R. pt. 50.[3/] The one-hour standard for ozone is 0.12 parts per million ("ppm"). 40 C.F.R. § 50.9.[4/] Ozone levels in an area are measured by air quality monitors which must meet technical criteria specified in 40 C.F.R. pt. 58. The maximum hourly average concentrations of ozone are determined in accordance with methodology established in appendix H to 40 C.F.R. pt. 50. The ozone standard is exceeded if a monitor records a one-hour average ozone concentration in excess of .124 ppm.[5/]

Pursuant to the Act, as amended in 1990, EPA designated areas of the

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[3/] Ozone is not emitted directly from sources. Rather, it results from the combination of precursor pollutants - - volatile organic compounds (VOCs) and nitrogen oxides (Nox) - - with heat and sunlight. Therefore, ozone concentrations tend to be higher during summer months.

[4/] The "one-hour" standard was established by EPA in 1979. 40 C.F.R. § 50.9. In 1997, EPA established an eight-hour standard for ozone. 40 C.F.R. § 50.10. However, the one-hour standard continues to apply to the D.C. Area. 40 C.F.R. § 50.9(b).

[5/] Although the ozone NAAQS is 0.12 ppm, the monitors record data to three decimal points. In accordance with standard convention, EPA rounds the third decimal place up if 5 or higher, and down if 4 or lower. Therefore, a monitored concentration of 0.124 would be rounded to 0.12 and would not be recorded as an exceedance of the standard. 68 Fed. Reg. 19,115/3 [JA XX].

country as "attainment" or "nonattainment," depending upon whether or not they met the NAAQS for a particular pollutant, or "unclassifiable" if there was insufficient available information to classify an area. 42 U.S.C. § 7407(d). An area is nonattainment for ozone if the number of exceedances of the standard at any monitor is greater than an average of one per year. The attainment status is determined on a three-year basis, thus, for example, a monitor may have up to three exceedances of the standard during a three-year period and still be in attainment. If any monitor in the area has more than three exceedances during a three-year period, the entire area is in violation of the standard and is designated nonattainment.

Under the CAA 1990 Amendments, nonattainment areas were further classified according to the severity of the ozone problem as "marginal," "moderate," "serious," "severe," or "extreme." 42 U.S.C. § 7511(a)(1), Table 1. The classification is determined by the "design value" of the area. The design value is the fourth highest reading from the monitor in the area recording the highest ozone levels.[6/] The Act established air quality planning requirements that

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[6/] H.R. Rep. No. 101-490-Part 1, Comm. On Energy and Commerce, Clean Air Act Amendments of 1990, 101st Cong. 2d Sess. at 197 (1990). The design value is used for classifying the nonattainment status of the area because the standard allows an average of one exceedance per year over a three-year period.

increase cumulatively as the severity of the classification increases. The Act also established deadlines for attainment of the NAAQS, depending upon the nonattainment classification. For example, the latest ozone attainment deadline for a "serious" area was November 15, 1999, and the deadline for a "severe" area is November 15, 2005. 42 U.S.C. § 7511(a)(1). If EPA determines that an area has not attained the NAAQS by the applicable attainment date, the area must be reclassified to the higher of either (1) the next higher classification or (2) the classification applicable based on the actual air quality of the area. Upon reclassification, the area is subject to a new - and later - attainment date, but must also comply with the additional and more stringent planning requirements applicable to the higher classification. 42 U.S.C. § 7511(a)(1).

A. State Implementation Plans

The states have primary responsibility for ensuring that the ambient air meets the NAAQS for the identified pollutants. 42 U.S.C. § 7407(a). The states exercise this responsibility through adoption of legally enforceable State Implementation Plans ("SIPs"). 42 U.S.C. § 7410(a). The SIPs, and any revisions to the SIPs, must be adopted by the state after reasonable notice and public hearing. 42 U.S.C. § 7410(a)(1).

The SIP must meet numerous substantive requirements, set forth in 42

U.S.C. § 7410(a)(2). In addition to the general SIP requirements, nonattainment areas must submit SIPs meeting certain additional requirements which, for areas designated nonattainment for ozone, differ depending on the severity of the ozone problem. See generally 42 U.S.C. §§ 7502, 7511(a).

The states must provide an "attainment demonstration" SIP to show that the area will achieve the NAAQS by the area's statutory attainment deadline. Id. § 7511a(c). The heart of the attainment demonstration SIP is the emissions control strategy. The control strategy for a nonattainment area must "include enforceable emission limitations, and such other control measures, means or techniques (including economic incentives . . .), as well as schedules and timetables for compliance, as may be necessary or appropriate to provide for attainment of such standard in such area by the applicable attainment date." Id. § 7502(c)(6). The states must also adopt any reasonably available control measures ("RACM") that will advance the attainment date. Id. § 7502(c)(1).

For areas classified serious and severe, the states must also submit ROP SIPs that must demonstrate an average reduction of baseline emissions of 3% per year for each consecutive three-year period commencing in 1996 until the attainment deadline for areas of that classification. Id. § 7511a(c)(2)(B). Thus, serious areas (with an attainment deadline of 1999) must submit an ROP plan for the period of

1996-99. Severe areas (with an attainment deadline of 2005) must submit ROP plans for 1996-99, 2000-02, and 2003-05. Nonattainment area SIPs must also "provide for the implementation of specific [contingency] measures to be undertaken if the area fails to make reasonable further progress, or to attain the national primary ambient air quality standard" by the applicable attainment deadline. Id. § 7502(c)(9).

B. EPA's Role With Respect To State Implementation Plans

The SIPs must be reviewed and approved by EPA. Id. § 7410(k). The EPA approval is a two-step process: First, within 60 days of EPA's receipt of a SIP submission, but not later than six months after the date by which the state is required to submit the plan, EPA is required to make a threshold "completeness determination" – whether the submission meets the minimum criteria for submissions established by EPA's regulations. 40 C.F.R. pt. 51, app. V. If EPA does not act within the six-month period, the submittal is deemed complete by operation of law. Second, within 12 months after the state submittal is found to be complete by EPA or by operation of law, EPA is required to act on the submittal. If EPA determines that the SIP is complete, "the Administrator shall approve" the SIP within 12 months of such determination "if it meets all of the applicable requirements" of the Act. 42 U.S.C. § 7410(k)(2) & (3). If EPA determines that

the submitted SIP does not meet all of the applicable requirements of the statute, it can issue a conditional approval, a partial approval and disapproval, or a full disapproval. Id. § 7410(k)(3) & (4).

EPA may conditionally approve a SIP revision based on a commitment of the state to adopt specific enforceable measures by a date certain, but not later than one year after the date of the conditional approval of the plan revision. Id. § 7410(k)(4). If a state fails to fulfill its commitment within one year, the conditional approval converts to a disapproval. Id.

STATEMENT OF FACTS

I. The Washington D.C. Metropolitan Area Air Quality Region

The D.C. Area was designated nonattainment by operation of law in 1991 for the one-hour ozone NAAQS. Id. § 7407(d)(1)(C). Also in 1991, the Area was classified as "serious" based on data collected during the three-year period of 1987-89. See, Designation of Areas for Air Quality Planning Purposes, 40 C.F.R. § 81.309 (D.C.), § 81.321(Md.), § 81.347 (Va.) (2002). During that baseline period, there were 12 monitors in the Area, and all 12 of them registered at least one exceedance of the ozone standard. The monitor recording the worst air quality registered an average of 8.1 exceedances per year during the period. The design value during that period (the fourth highest reading at the worst monitor) was

0.165 ppm, placing the D.C. Area within the "serious" classification. (The range for the "serious" classification is 0.160 ppm - 0.180 ppm. 42 U.S.C. § 7511(a)(1), table 1. 67 Fed. Reg. 68,805, 68,809, Table 4 (Nov. 13, 2002) [JA XX].

The air quality in the D.C. Area has improved dramatically since that time. By 1999 (the statutory attainment deadline for the serious areas), the air quality in the Area had improved from "serious" to "marginal." The Area then had 18 monitors (increased from 12) and only 7 of the 18 exceeded the standard during the three-year period of 1997-99. 67 Fed. Reg. at 68,807-08, Table 3 [JA XX-XX]. The average number of exceedances per year at the *worst* of those 7 monitors was 4.2. The design value at the *worst* of the monitors was 0.132 ppm, which is within the "marginal" nonattainment classification (up to 0.138 ppm.) Id.; 42 U.S.C. § 7511(a)(1).

The data for the three-year period commencing in 1999 (the period 1999-2001) was even better. The Area then had 19 monitors, and only 3 of the 19 exceeded the standard during this three-year period. 67 Fed. Reg. at 68,807-08, Table 3 [JA XX-XX]. The average number of exceedances per year at the *worst* of those 3 monitors was 2.1. The design value at the *worst* of the monitors was 0.130 ppm, again well within the "marginal" nonattainment classification. Id. Indeed, the D.C. Area was very close to attainment by the 1999 deadline for serious areas.

II. The D.C. Area SIPs

The original attainment demonstration and ROP SIPs were submitted by the States in 1997 and 1998, amended in 1998 and 1999, and supplemented in 2000. 68 Fed. Reg. at 19,107, Tables 1 and 2 [JA XX].[7/] The SIPs did not provide for attainment by November 15, 1999, the statutory attainment deadline for "serious" areas, primarily due to transported ozone from upwind areas over which Maryland, Virginia, and the District of Columbia have no control. Instead, the States requested that EPA extend the attainment deadline from 1999 to 2005, and submitted an attainment demonstration showing attainment by 2005. EPA initially approved the SIPs and the States' requests to extend the deadline for attainment, based on the effect of transported ozone on the Area's ability to attain by the statutory deadline. See Approval & Promulgation of Air Quality Implementation Plans, 66 Fed. Reg. 586 (Jan. 3, 2001) ("Approval") [JA XX].[8/] The EPA approval

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[7/] Each of the States is required to submit a SIP and SIP revisions. However, the three States jointly conducted modeling and other analyses to assess the emission reductions necessary to demonstrate attainment. Thus there is a single attainment demonstration reflected in the SIPs submitted by each State.

[8/] EPA's extension of the deadline for attainment was consistent with its Guidance entitled "Extension of Attainment Dates for Downwind Transport Areas," 64 Fed. Reg. 14,441 (Mar. 25, 1999) [JA XX] in which EPA interpreted the Act as allowing the extension of attainment dates for nonattainment areas

action was challenged by Sierra Club, Petitioner herein, on grounds that the SIPs lacked certain required elements and that EPA had no authority to extend the statutory deadline for attainment without reclassifying the Area. This Court agreed in part, vacated the Approval, and remanded the SIPs to EPA for further consideration. Sierra Club I. Subsequently, the United States District Court for the District of Columbia ordered EPA to take final action on the SIP submittals that had been remanded to EPA. Sierra Club v. Whitman, No. 1:02 CV 022235 (D.D.C. Dec. 18, 2002).

On April 17, 2003, EPA conditionally approved the SIPs, based on the States' newly submitted commitments to adopt specific enforceable measures to cure the deficiencies identified by this Court in Sierra Club I and to comply with the requirements of the severe area classification. 68 Fed. Reg. 19,106-19,133 [JA XX-XX, XX].

A. The Control Strategy

The SIPs contain various control strategies to reduce the emissions of VOCs and NOx from major stationary sources, smaller area sources, and mobile sources. The control strategy contains sufficient control measures to support a 2005

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which are subject to ozone transport from upwind areas which prevented the area from reaching attainment.

attainment demonstration, including all of the control measures required for "serious" area classifications, and several of the control measures required for "severe" area classifications.[9/] The control measures adopted by the States as part of the SIP submittals, and their implementation status, are identified in the Technical Support Document for the One-Hour Ozone Attainment Demonstrations submitted by the State of Maryland, Commonwealth of Virginia and the District of Columbia for the Metropolitan Washington, D.C. Ozone Nonattainment Area ("TSD") (CR# 446) Table III.F-2a (D.C.), F-2b (Md.), and F-2c (Va.), at 22-23 [JA XX-XX].

B. The Attainment Demonstration

The attainment demonstration jointly submitted by the States showed that implementation of the control measures adopted in the SIPs would result in attainment of the NAAQS in the D.C. Area by the statutory deadline of 2005.

The attainment demonstration is based on a photochemical grid model known as the "Urban Airshed Model" ("UAM"),[10/] used to model emissions and

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[9/] Although the States had not previously been required to adopt the control strategies for severe area classifications, they chose to do so as an optional means of reducing emissions to aid in demonstrating timely attainment as a serious area.

[10/] Until April 15, 2003, the UAM was a "preferred" model for photochemical modeling involving urban areas. 40 C.F.R. pt. 51, app. W at §§ 3.1.2, 6.2.1.a., and app. W at app. A, § A.6 (2001). On April 15, 2003, EPA published a rule

meteorological conditions to predict future ozone concentrations.[11/] The States selected three dates in the base year of 1991 (July 16, 19 and 20) that represented weather patterns conducive to high ozone concentrations. TSD at 37-38 [JA XX-XX]. While all three of the dates used for baseline analysis were chosen because of high ozone-producing meteorological conditions, one of them (July 20) was particularly extreme - ranked as the 13th highest ozone-producing date over a period of 46 years. 68 Fed. Reg. at 19,110/3 [JA XX].[12/]

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amending appendix W and removing the UAM from its list of recommended models. 68 Fed. Reg. 18,440, 18,445 (Apr. 15, 2003) [JA XX]. References hereafter to appendix W are to the version *prior* to the April 15, 2003 revision, except when otherwise noted.

[11/] The model is complex. The Area is divided into grids with vertical layers, and programmed with meteorological data (including wind fields, sun fields, and temperature fields) as well as emissions of VOCs (separated by type) and nitrogen oxides from major sources, area sources and mobile sources in each grid cell. Submodels determine chemical interaction mechanisms for each grid cell. 40 C.F.R. pt. 51, app. W at app. A, § A.6 (2001).

[12/] The ranking is based on Cox, W.M. and S. Chu, "Assessment of Interannual Ozone Variation in Urban Areas from a Climatological Perspective," 30 Atmospheric Environment 2615-2624 (1996) ("Cox-Chu data") (CR# 232) [JA XX-XX]. The Cox Chu data actually ranks July 20, 1991 as the *12th* highest ozone producing date in *46* years of data. However, in the rulemaking record it was erroneously noted as the *13th* highest ozone producing date out of *44* years of data. Although the actual data reveal that the ozone-producing conditions on July 20, 1991 are statistically more rare, we will continue to refer in this brief to the 13th highest out of 44 years because that is the information relied upon by EPA in its analysis of the attainment demonstration.

The actual measured peak ozone concentrations for the baseline dates (in parts per billion or "ppb")[13/] were 137, 132, and 178, respectively (all of which were nonattainment because they are above the NAAQS of 124 ppb (0.124 ppm)). Using meteorological data from those dates, and emissions data (without the controls adopted in the SIPs) the model was run to *predict* the ozone concentrations on those dates in the base year. The model's peak *predictions* for July 16, 19 and 20 in the base year were 167, 168, and 198, respectively -- approximately 20% higher than the actual *measured* peaks on those days - - indicating that the model generally over-predicts ozone concentrations in the D.C. Area by approximately 20%. This comparison is illustrated in Table III.G-1, TSD at 37 [JA XX] and Table IV.D-1, TSD Amendment (CR# 461) at 10-11 [JA XX-XX].

EPA then ran the model using the same meteorological data from the base year events, and emissions data *assuming implementation of the control measures adopted in the SIPs* to predict peak ozone concentrations in the attainment year. EPA then compared the model's predicted *peak* ozone concentrations (the highest predicted one-hour ozone concentration at any monitor) to the NAAQS (124 ppb).

[13/] Parts per million is converted to parts per billion by removing the decimal point. Thus, 0.125 ppm is the same as 125 ppb.

This is called the "deterministic" test. The predicted *peak* ozone concentrations were 150, 139 and 178, respectively (unadjusted for model over-prediction). Id.

Because the comparison of base year measurements to base year predictions reveals an average over-prediction of 20%, EPA adjusted for over-prediction by reducing the model-predicted peak values by 20%. As adjusted, the modeled peaks predictions are 120, 111, and 142, respectively. Another means of adjustment for the over-prediction is a comparison of the average ozone reduction between the base case predictions (without control) and the future year predictions (after control), which indicated that the average reduction in ozone after implementation of the control measures was approximately 22 ppb. By reducing the actual measured peak ozone concentrations in the base year by 22 ppb to predict the peak ozone concentrations after control, the peak ozone concentrations were 115, 110, and 156, respectively. Using either of these adjustments for over-prediction, two of the three dates modeled demonstrated attainment.

The deterministic test is much stricter than the actual attainment test because it models the highest or "peak" ozone concentration at any monitor, whereas each monitor is permitted to have an average of one exceedance per year. Therefore, EPA conducted a statistical test to determine the highest ozone concentration that

could occur and still be consistent with attainment.[14/] That is, on a statistical basis, if the ozone concentration did not exceed the specified levels for each day modeled, the NAAQS would not be violated. The statistical test indicated that ozone concentrations of 130 ppb, 124 ppb, and 137 ppb, respectively, would still reflect attainment. Id. Again, two of the three dates were consistent with attainment using the statistical analysis.

EPA recognized that the statistical test is also not reflective of the actual attainment test, because the statistical test is based on meteorological conditions in a single year, whereas an area is not in violation of the standard unless a monitor exceeds the NAAQS more than an average of one time per year over a three-year period. Therefore, EPA used the model to determine the design value (the measure of attainment) for the attainment year. 68 Fed. Reg. at 19,114/1 [JA XX]. To predict the design value, EPA calculated the design value for the base year by reviewing data for each three-year period that included the base year of 1991 (1989-91, 1990-92, 1991-93) and found the average design value (i.e., the average of the fourth highest reading at any monitor during that three-year period) was 136

[14/] The statistical test is based on an analysis of 46 years of meteorological data, ranked according to the ozone forming potential. From this data, one can determine the statistical likelihood of meteorological conditions recurring in the area. Cox-Chu [JA XX].

ppb. EPA then compared the average of the modeled peak base case (before control strategy implemented) to the average of the modeled peak control case (after control strategy implemented) and found a ratio of .88. That is, the model predicted that with controls implemented by the attainment date, ozone levels would decrease to 88% of the pre-control level. This is referred to as the "relative reduction factor" ("RRF"). That RRF is then applied to the *measured* design value for the base year (136 ppb) to determine the *predicted* design value for the attainment year. This analysis allowed EPA to apply the percentage of ozone reduction predicted by the model as a result of control measures, to the actual measured design value for the base year, to determine the predicted design value for the attainment year. Application of the RRF yielded a predicted design value for the attainment year of 119.6 ppb. This is under the NAAQS of 124 ppb and thus demonstrates attainment. TSD at 37-38 [JA XX].

C. The States' Commitments

Each of the States has submitted to EPA commitments to adopt specific enforceable measures to comply with all of the statutory requirements for a severe nonattainment area. [JA XX, XX, XX]. Specifically, each of the States has committed to submit to EPA by April 17, 2004, the following:

(1) an appropriate RACM analysis for the Area, along with any revisions to

the attainment demonstration SIP necessitated by such analysis.

(2) a ROP plan for the 2000-2002 and 2003-2005 periods to demonstrate emission reductions of 3% per year.

(3) contingency measures to be implemented if the Area fails to meet any ROP milestone or fails to reach attainment by the applicable deadlines.

(4) an updated attainment demonstration that reflects revised MOBILE6-based motor vehicle emissions budgets, including revisions to the attainment modeling and/or weight of evidence demonstration, as necessary, to demonstrate attainment by November 15, 2005.[15/]

(5) other severe area requirements, including specific enforceable transportation control strategies and control measures to offset any growth in emissions from increase in vehicle miles traveled, reasonably available control technology for additional major sources, revised new source review requirements mandating further reductions of VOCs and NOx, and a fee requirement for major sources of NOx and VOCs should the area fail to attain by 2005. 42 U.S.C. §§ 7511a, 7511d.

[15/] MOBILE6 is the current model for determining motor vehicle emissions. As discussed later in this Brief, the States' attainment demonstration was based on an earlier generation of MOBILE6 (MOBILE5), because MOBILE6 was not available at the time.

STANDARD OF REVIEW

EPA's conditional approval of the D.C. Area SIP is subject to judicial review under CAA section 307(b)(1), 42 U.S.C. § 7607(b)(1). The standard of review applicable to an EPA SIP approval action is the deferential "arbitrary or capricious" standard set forth in the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2)(A). United States v. Mead Corp., 533 U.S. 218, 227 (2001).

Under this standard, a court may not substitute its judgment for that of the agency, especially where the challenged decision implicates substantial agency expertise. Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Courts instead must affirm agency action if the agency has considered the relevant factors and articulated a "rational connection between the facts found and the choice made." Id. (citation omitted). Moreover, where, as here, the agency's decision rests on an evaluation of complex scientific data within the agency's technical expertise, courts are "extremely deferential." New York v. Reilly, 969 F.2d 1147, 1152 (D.C. Cir. 1992); Connecticut v. EPA, 696 F.2d 147, 159 (2d Cir. 1982) (deferring to EPA's choice of technical models because "[t]o reject the EPA's conclusion . . . would be to substitute our judgment concerning mathematical modeling techniques for that of the Agency"); Chemical Mfrs. Ass'n v. EPA, 919 F.2d 158, 167 (D.C. Cir. 1990) (according deference even where

[data] is "'imperfect' or 'preliminary'").

When reviewing a federal agency's interpretation of a statute it administers, the proper analysis is the two-step framework established in Chevron U.S.A., Inc. v. NRDC, 467 U.S. 837, 842-45 (1984). Under the first step, the reviewing court must determine "whether Congress has directly spoken to the precise question at issue." Id. at 842. If Congress' intent is clear from the statutory language, the inquiry ends because the Court "must give effect to the unambiguously expressed intent of Congress." Id. at 842-43. If, however, the statute is silent or ambiguous with respect to the precise question at issue, the court must decide whether the agency's interpretation is based on a permissible construction of the statute. Id. at 843; see Smiley v. Citibank, N.A., 517 U.S. 735, 744-45 (1996) (a "permissible" interpretation is one that is "reasonable"); see also Dep't of Treasury v. FLRA, 494 U.S. 922, 933 (1990) ("[W]hen an agency is charged with administering a statute, part of the authority it receives is the power to give reasonable content to the statute's textual ambiguities.") (citing Chevron, 467 U.S. at 843-44).

The EPA actions under review here qualify for Chevron deference because in the CAA, Congress delegated to EPA the authority to review SIPs for their compliance with the statute and EPA's implementing regulations. 42 U.S.C. § 7410(k). The conditional SIP approval was promulgated through

notice-and-comment rulemaking in the exercise of such authority. See United States v. Mead Corp., 533 U.S. at 227-30 (2001).

SUMMARY OF ARGUMENT

Conditional approval of a SIP is authorized by section 42 U.S.C. § 7410(k)(4) when the SIP contains substantive, but not wholly satisfactory, provisions, and the States commit to adopt specific enforceable measures to cure the deficiencies within one year of the conditional approval. In this case, the States had adopted and implemented a control strategy, and the SIPs provided an attainment demonstration showing that the Area would be in attainment by the statutory deadline of November 15, 2005. Although the SIPs are deficient in several respects, each of the States has committed to adopt specific enforceable measures to cure the deficiencies within one year of the conditional approval. EPA reasonably determined that the deficiencies, if cured within the one year period, would not jeopardize attainment. Accordingly, EPA conditionally approved the SIPs based upon the States' commitments. EPA's action is authorized by the statute and is fully supported by the record. Thus the conditional approval should be upheld.

EPA's conditional approval of the attainment demonstration is consistent with the Act and EPA's regulations. The demonstration was "based on

photochemical grid modeling" as required by the CAA, and supplemented with additional analyses consistent with EPA's modeling guidance. The attainment demonstration, considered by EPA in a weight-of-evidence analysis, showed that the States' control strategies would bring the Area into attainment by the statutory deadline of November 15, 2005. Further, the States have committed to conduct the RACM analysis and adopt any additional control measures that will advance the attainment date. Accordingly, EPA's conditional approval of the attainment demonstration should be upheld.

EPA's conditional approval of the 1999 ROP plan, which was based on the MOBILE5 model, was proper and consistent with EPA guidance, because that plan is based on the most current model available at the time the modeling was done. Further, the 1999 ROP plan did not rely on any reductions that could not be properly represented by the MOBILE5 model. Moreover, the States have committed to conduct further modeling using the MOBILE6 model in connection with the attainment demonstration, and to adopt further control measures, if necessary to demonstrate timely attainment based on the MOBILE6 model.

EPA properly exercised its discretion to allow the States a reasonable period of time after reclassification from "serious" to "severe" to submit revised SIPs and to meet ROP milestones that had already passed because the requirements were not

applicable to the States until the effective date of reclassification. It would have been unfair and inconsistent with the APA to retroactively apply deadlines that had already passed before the States were under any obligation to comply with them.

ARGUMENT

I. EPA'S CONDITIONAL APPROVAL OF THE D.C. AREA SIP WAS REASONABLE AND CONSISTENT WITH THE CAA.

CAA section 110(k)(4) authorizes EPA to conditionally approve SIPs that are substantially complete but lack certain elements that prevent full approval, as long as the State commits to adopt specific enforceable measures to remedy such defects by a date certain within one year of EPA's conditional approval. 42 U.S.C. § 7410(k)(4). EPA viewed the SIPs submitted by the States in this case as substantially complete, as they contained most of the required elements of a severe area SIP and, importantly, contained an attainment demonstration consistent with attainment by the 2005 deadline. However, the SIPs lacked certain components, including a RACM analysis, post-1999 ROP plans, and contingency measures. Rather than disapproving the SIPs, EPA reasonably exercised its authority to conditionally approve the SIPs pursuant to CAA section 110(k)(4), based on the States' newly submitted commitments to adopt specific enforceable measures to remedy the deficiencies within one year from the date of the conditional approval.

68 Fed. Reg. 19,106/1 [JA XX]. EPA's interpretation of the Act's conditional approval provision is entitled to deference under Chevron, step II, and its action in conditionally approving the SIPs must be upheld as neither arbitrary nor capricious.

A. Conditional Approval is Not Barred by Sierra Club I.

Petitioner argues that the conditional approval is barred by this Court's decision in Sierra Club I, which vacated EPA's earlier full (i.e., *unconditional)* approval of the serious area SIPs submitted by the States. Petitioner reads that decision much too broadly. This Court did not consider whether EPA could conditionally approve the SIPs, because conditional approval was not before the Court in Sierra Club I.

In Sierra Club I, this Court held that the SIPs could not be *fully* approved under CAA section 110(k)(3) because they lacked certain required components of an attainment demonstration, including the post-1999 ROP plan, contingency measures to take effect if the ROP milestones were not met or the Area failed to attain by the statutory deadline, and a valid RACM analysis to determine if any additional measures were practicable and would advance the attainment date. Sierra Club I, 294 F.3d at 162. EPA's action in this final rule is quite different. EPA has not fully approved the attainment demonstration SIPs under CAA section

110(k)(3) but, rather, has conditionally approved the SIPs under CAA section 110(k)(4). The conditional approval is appropriate because the States have provided the requisite commitments to adopt specific enforceable measures to cure the defects identified by this Court in Sierra Club I.

Petitioner also argues that EPA is estopped from conditionally approving the SIPs because it did not argue in Sierra Club I that conditional approval of the SIPs was allowable or appropriate. Pet'r Br. at 19. However, it would not have been appropriate for EPA to argue the propriety of conditional approval under CAA section 110(k)(4) as an alternative basis for upholding the full approval of the SIPs considered by the Court in Sierra Club I (as Petitioner suggests), because EPA is precluded from advancing a rationale for its final action that was not the basis for the action taken. Motor Vehicle Mfrs Ass'n., 463 U.S. at 50 (agency action can only be upheld on the basis articulated by the agency itself). Nor would it have been appropriate to conditionally approve those SIPs, even if EPA could have permissibly relied upon an alternative basis for approval other than full approval pursuant to CAA section 110(k)(3), because the States had not, at that time, provided the commitments that are a prerequisite to conditional approval under section 110(k)(4).

B. Conditional Approval Does Not Unlawfully Extend SIP Submittal

Deadlines.

Petitioner argues that the conditional approval improperly extends the statutory deadline for SIP submittals. The conditional approval does not extend the time for SIP submittals - it simply allows the States additional time to cure identified deficiencies in the SIPs already submitted, reviewed by EPA, and approved subject to the commitments. The additional time (of up to one year) is expressly allowed by the statute where the States have made commitments to adopt specific enforceable measures, as in this case. 42 U.S.C. § 7410(k)(4).

Nor does this Court's analysis in Natural Resources Defense Council v. EPA, 22 F.3d 1125 (D.C. Cir. 1994) ("NRDC") support Petitioner's argument. NRDC was a case in which *no* substantive SIP had been submitted, and the conditional approval was based solely on the State's commitment to submit a substantive SIP within a year. Id. at 1133-34. In this case, substantive SIPs have been submitted, and the conditional approval provides additional time only to adopt the specific enforceable measures in accordance with the commitments as contemplated by the statute.

Petitioner attempts to shoehorn this case into the NRDC facts by arguing that the SIPs are not substantive because some required elements are entirely absent. However, this Court determined in Sierra Club I, at Petitioners' urging,

that the missing elements of the SIPs (post-1999 ROP plan, contingency measures, and the RACM analysis) are *not* independent components but, rather, are integral parts of the overall attainment demonstration. Sierra Club I, 294 F.3d at 163-64.[16/] Because the attainment demonstration SIP submittals contain many substantive elements, conditional approval is appropriate even though the attainment demonstration is deficient in some respects. Moreover, the SIPs do contain the most significant portions of the attainment demonstration -- a modeled demonstration of attainment by the statutory deadline, including all adopted control measures necessary to demonstrate attainment by 2005. 68 Fed. Reg. at 19,109/1-2 [JA XX]. As explained further below, the post-1999 ROP plan, contingency measures, and RACM elements (as well as additional elements required for the severe area classification) that the States have committed to adopt will not jeopardize that attainment demonstration. Accordingly, it was neither arbitrary nor capricious for EPA to conditionally approve the attainment demonstration, based on the States' commitments to provide the specific enforceable measures within the one year period established by statute.

C. EPA's Conditional Approval is Appropriate Because the SIPS

[16/] Had those SIP elements been totally independent of the attainment demonstration, there would have been no basis for the Court to vacate approval of the attainment demonstration due to lack of such elements.

Demonstrate Timely Attainment.

Petitioner argues that EPA's conditional approval of the SIPs in the absence of RACM and post-1999 ROP plans violates the mandate of 42 U.S.C. § 7410(*l*), which provides that EPA "shall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress." EPA acknowledges that both RACM and ROP are "applicable requirements"; however, the conditional approval of the attainment demonstration SIPs does not "interfere" with those requirements. The conditional approval merely allows the States additional time to submit those provisions to comply with the requirements, and is based on EPA's determination that the additional time permitted will not interfere with the attainment deadline. Nor does the conditional approval in the absence of those requirements jeopardize the attainment date. Because the States have committed to complete the RACM analysis and adopt ROP plans by April 2004, EPA reasonably concluded that the States would have sufficient time to implement any necessary controls prior to the beginning of the 2005 ozone season. 68 Fed. Reg. at 19,109/1 [JA XX]. Accordingly, the delay in adoption of the control measures will not interfere with the attainment deadline.

Although the attainment demonstration establishes attainment by the

applicable attainment deadline of November 15, 2005, Petitioner argues that the SIPs cannot be conditionally approved because, in the absence of RACM, they do not demonstrate attainment "as expeditiously as practicable." Pet'r Br. at 21. However, a measure is only required as RACM when it will advance the attainment date. EPA reasonably concluded, based on the time remaining prior to the attainment deadline, that no measures would meet this test.

At the time of EPA's final action conditionally approving the SIPs, the 2003 ozone season was nearly upon us.[17/] EPA reasonably concluded that the few months between its final action (April) and the onset of the peak ozone season (June) was clearly not sufficient time for the three States to independently (a) complete the RACM analysis, (b) identify any appropriate RACM, (c) conduct a rulemaking with appropriate notice and comment periods to adopt the RACM, and (d) allow for implementation of the adopted measures. 68 Fed. Reg. at 19,110/2 [JA XX].[18/] EPA thus determined that the only way RACM could advance the attainment date is if additional control measures are adopted and implemented prior

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[17/] The ozone period for which monitoring is required is from April 1 to October 31. 40 C.F.R. pt. 58, app. D § 2.5. However, the peak ozone season is June-August.

[18/] EPA's conclusion is consistent with estimates provided by the States indicating the time required to complete the regulatory processes for adoption of the additional SIP provisions. CR # 227, 228, 229 [JA XX, XX, XX].

to the 2004 ozone season. The States have committed to conduct a RACM analysis to determine if any RACM will advance the attainment date, and to adopt any RACM that may be necessary, prior to April 17, 2004. Accordingly, if the RACM analyses do indicate that there are potential RACMs that may advance the attainment date, the States have committed to implement those measures in timely fashion to advance the attainment date.

Petitioner's argument that the absence of the contingency measures will somehow prejudice the attainment date is also flawed, because the contingency measures do not "kick in" at the end of the ROP period as Petitioner states. Pet'r Br. at 22. Rather, they apply only after EPA makes a determination that the ROP milestone has not been met. Because EPA has not yet made that determination with respect to any milestone, the contingency measures would not yet apply, even if they were part of the SIP.[19/] Further, contingency measures do not advance an area's attainment date. They merely provide interim reductions while an area remedies a failure to meet a milestone. Where the attainment demonstration

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[19/] Petitioner similarly argues that contingency measures for failure to reach attainment by the 1999 deadline for a serious nonattainment area should have already kicked in. However, the contingency measures would not become effective until EPA determined that the Area did not attain by the deadline, and that determination was just made on January 24, 2003. 68 Fed. Reg. 3410 [JA XX].

includes all measures necessary to provide for timely attainment, the absence of contingency measures will not prejudice the demonstration.

D. EPA's Conditional Approval is Consistent With the Enforcement Provisions of the CAA.

Petitioner argues that the conditional approval of the SIPs eviscerates the Act's remedial scheme for imposition of sanctions. However, section 110(k)(4) expressly authorizes EPA to conditionally approve SIPs that are defective and allows a limited period of time, not to exceed one year, for states to cure the identified deficiencies. In short, the result complained of by Petitioner is the intended result of the conditional approval provision. Petitioner should address this complaint to Congress, not to this Court.

Morever, the conditional approval does not eviscerate the Act's sanctions provisions; rather, it simply establishes a different sanction clock when conditional approval is appropriate.[20/] The conditional approval starts the clock running for the States to fulfill their commitments. If the States fail to comply with their commitments by the date required, the conditional approval is treated as a

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[20/] EPA believes that deferral of the sanctions, as contemplated by conditional approval, is appropriate when the State is both willing and able to make commitments that must be fulfilled within the specified period, not to exceed one year. If the State is either unwilling or unable to make the commitments, then a disapproval, in whole or in part, would be appropriate.

disapproval and the statutory sanctions clock starts at that time. Id.

E. The States' Have Committed to Adopt "Specific Enforceable Measures" as Required by the CAA for Conditional Approval.

CAA section 110(k)(4) provides that the conditional approval may be based on a "commitment of the State to adopt specific enforceable measures by a date certain." EPA interprets the provision to require that the States commit to adopt specific enforceable measures by a date certain, but does not require that the individual measures be identified in the commitment. Petitioner, on the other hand, interprets the provision to require the States to identify, in their commitments, the individual enforceable measures that will be adopted by a date certain. Pet'r Br. at 24. Because EPA's interpretation is reasonable and consistent with the purpose of the statute and, specifically, consistent with the purpose of the conditional approval provision, it is entitled to deference under Chevron, step II.

EPA's interpretation is consistent with the Act because the States have submitted commitment letters in which they commit to *adopt*, within one year, specific enforceable measures to cure each of the deficiencies identified by EPA. It is the *adoption* of the measures within one year - - not the identification of the measures - - that is required by the statute. It makes no practical difference when the measures are identified, as long as they are adopted by the required date.

EPA's interpretation is also consistent with the conditional approval provision. EPA does not require the commitments to identify the specific measures the States will adopt because that would defeat the purpose of the conditional approval which is, in large part, to allow the States additional time to identify the measures needed.[21/]

The States have committed to identify the specific enforceable measures and adopt them within the one year period. This is all that is required under EPA's reasonable interpretation of section 110(k)(4), and so the petition must be denied.

II. EPA'S CONDITIONAL APPROVAL OF THE D.C. AREA'S ATTAINMENT DEMONSTRATION WAS REASONABLE AND IS CONSISTENT WITH THE CAA, IMPLEMENTING REGULATIONS, AND EPA GUIDANCE DOCUMENTS.

A. The Conditional Approval of the Attainment Demonstration Is Proper Because the SIPs Demonstrate Attainment as Expeditiously as Practicable.

Petitioner challenges the conditional approval of the attainment demonstration on grounds that it fails to demonstrate attainment "as expeditiously as practicable." Pet'r Br. at 25. While EPA agrees that attainment is to be achieved as expeditiously as practicable, EPA has determined, in this case, that it is

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[21/] In the case of RACM, the States could not identify specific measures until after the RACM analysis is completed. However, the States have made a commitment to complete the analysis and adopt any such measures as may be appropriate within the one year period authorized by the statute.

not practicable for the Area to reach attainment prior to the 2005 ozone season. 68 Fed. Reg. at 19,110/2 [JA XX]. Because that conclusion is rational and supported by the record, this challenge, too, must be denied. See Argument I.C.

B. The Attainment Demonstration Based on Photochemical Grid Modeling Supplemented with Weight-of-Evidence Analysis Is Consistent with the CAA.

Based on its review of the D.C. Area's attainment demonstration, EPA determined that the D.C. Area would meet the one-hour ozone NAAQS by 2005. 68 Fed. Reg. at 19,109/1 [JA XX]. The Agency's determination was based on the photochemical grid modeling performed by the States and supplemental analyses, which EPA considered in a "weight-of-evidence" analysis. 68 Fed. Reg. at 19,111/3 [JA XX].

Petitioner launches a series of attacks on EPA's weight-of-evidence analysis, arguing that it is inconsistent with the statute and with EPA's regulations and guidance documents. According to Petitioner, attainment must be demonstrated exclusively by use of the UAM and, if the model simulations fail to demonstrate attainment, then the State must perform "iterative" modeling runs until the modeling alone demonstrates attainment. Pet'r Br. 27. Petitioner misconstrues the statute and EPA's regulations and guidance. As demonstrated below, use of a weight-of-evidence analysis is consistent with the CAA, applicable regulations,

and EPA guidance documents. Further, EPA's use of weight-of-evidence in this case was reasonable and is supported by the record. Accordingly, EPA's conditional approval of the attainment demonstration should be upheld.

1. The Attainment Demonstration is Based on Photochemical Grid Modeling.

CAA section 182(c)(2)(A) provides that "the attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective." 42 U.S.C. § 7511a(c)(2)(A) (emphasis added). EPA's construction of the statute should be upheld under the first step of the Chevron analysis because the statutory requirement that attainment demonstrations be "based on photochemical grid modeling" unambiguously establishes that such demonstrations need not depend exclusively on photochemical grid modeling.

The ordinary meaning of the phrase "based on" requires only that an attainment demonstration "arise from" photochemical grid modeling. See McDaniel v. Chevron Corp., 203 F.3d 1099, 1111 (9th Cir. 2000) (reviewing cases interpreting the phrase "based on"). Congress' choice of the phrase "based on" indicates that the model must be used as a "starting point" or "foundation," without precluding the use of supplemental analyses. See id.; United States v. United

Tech. Corp., 985 F.2d 1148, 1158 (2d Cir. 1993) ("based upon" does not mean "solely").

To account for uncertainty in the modeling results, the weight-of-evidence analyses use the relationship between modeled peak predictions in the base year and the attainment year to determine the decrease in ozone concentration predicted to result from the implementation of adopted control measures. TSD at 40-41, Att. 5 [JA XX]. The relationship is expressed as the relative reduction factor ("RRF"). The RRF is then applied to the measured base year design value to estimate the design value in the attainment year. Id. Thus, this supplemental analysis is indisputably "based on" photochemical grid modeling and therefore comports with the plain meaning of 42 U.S.C. § 7511(c)(2)(A). See 68 Fed. Reg. 19,112/3 [JA XX] ("photochemical grid modeling is the starting point of the analysis; indeed, the very purpose of the WOE analysis is to determine whether the modeling, in light of all the evidence, demonstrates attainment.") Accordingly, EPA's use of weight-of-evidence analyses should be upheld under the first step of the Chevron test.

Even if the statutory language is deemed ambiguous, EPA's interpretation is reasonable and must be upheld under Chevron's second step. EPA's interpretation of 42 U.S.C. § 7511a(c)(2)(A) contemplates that considerations of model

uncertainty may inform the evaluation of whether the SIP adequately demonstrates attainment. This interpretation is reasonable given the limitations on the predictive capacity of models. By definition, "[a]ny model is an abstraction from and simplification of the real world," Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 535 (D.C. Cir. 1983). "That the model does not fit every application perfectly is no criticism; a model is meant to simplify reality in order to make it tractable." Chemical Mfrs.' Ass'n v. EPA, 28 F.3d 1259, 1264-65 (D.C. Cir. 1994). Hence, implicit in the statutory requirement that attainment demonstrations be "based on photochemical grid modeling," 42 U.S.C. § 7511a(c)(2)(A), is an obligation to ensure that "EPA's reliance on its model did not exceed the bounds of its usefulness." Sierra Club v. Costle, 657 F.2d 298, 334 (D.C. Cir. 1981). By interpreting 42 U.S.C. § 7511a(c)(2)(A) to allow interpretation and analysis of modeling results, EPA ensures that "ultimate responsibility for the policy decision remains with the agency rather than the computer." Id. (recognizing the need for a "safety valve[] in the use of such sophisticated methodology" as modeling). This interpretation has been upheld by the Fourth Circuit, which stated:

> EPA has long recognized that there are uncertainties inherent in available models and in estimating future emissions . . . EPA thus allows the use of supplemental analysis, including a "weight of

> evidence" analysis, to demonstrate attainment in cases where the modeling show ozone levels exceeding the NAAQS.

1000 Friends of Maryland v. Browner, 265 F.3d 216, 234 (4th Cir. 2001) (internal quotations omitted).

The weight-of-evidence analysis offers a means of improving the utility of the output of a photochemical grid model. In this case, use of the RRF allows EPA to interpret the modeled results in a manner consistent with the standard for attainment, i.e., the design value. The prohibition on weight-of-evidence analysis urged by Petitioner would effectively impose a constraint on EPA that conflicts with the flexibility in making attainment demonstrations that was contemplated by Congress in section 182(c)(2)(A). Accordingly, Petitioner's interpretation that an attainment demonstration should be based exclusively on the results of photochemical grid modeling, Pet'r Br. at 29, is simply not a plausible reading of the statute. EPA's interpretation, which allows the results of photochemical grid modeling to be supplemented with weight-of-evidence analyses, should be upheld because it adheres to the normal meaning of the statutory language and is supported by the broad discretion that Congress granted to EPA in section 182(c)(2)(A). 42 U.S.C. § 7511a(c)(2)(A). See Baltimore Gas & Elec. Co. v. NRDC, 462 U.S. 87, 103 (1983) (When an agency is "making predictions, within its area of special

expertise, at the frontiers of science," reviewing courts "must generally be at [their] most deferential.").[22/]

2. EPA Regulations and Guidance Documents Allow for Weight-of-Evidence Analysis.

Petitioner also contends that the weight-of-evidence approach is inconsistent with EPA's regulations and guidance documents. EPA's regulations provide that "the adequacy of a [State] control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in appendix W of this part." 40 C.F.R. § 51.112(a)(1). Although appendix W recommends that States use the UAM for modeling urban ozone formation, it does not preclude EPA from using supplemental analyses to interpret UAM results.[23/]

[22/] Because the weight-of-evidence analysis is "based on" photochemical grid modeling, there is no merit to Petitioner's alternative statutory argument that weight-of-evidence constitutes an "other analytical method" under section 182(c)(2)(A), thus requiring the EPA Administrator to determine that weight-of-evidence is "at least as effective" as photochemical grid modeling. Pet'r Br. at 33. EPA did not employ weight-of-evidence as an "other analytical method" in lieu of photochemical grid modeling. Therefore, the requirement of an effectiveness determination by the Administrator was not triggered.

[23/] Petitioner inaccurately characterizes the use of the relative reduction factor to predict design value as a "proportional rollback" that is not appropriate for prediction of future ozone concentrations. Pet'r Br. 29-30. A true proportional rollback model does not rely on any photochemical grid modeling, but simply assumes that a decrease in precursor emissions will result in a proportional decrease in ozone concentrations. 40 C.F.R. pt. 51, app. W § 6.2.1. That is not what EPA did here. The RRF of 0.88 equates to a 12% reduction in ozone,

The flexibility afforded in appendix W comports with the Agency's intent to give States considerable latitude in preparing their SIPs. See 40 C.F.R. § 51.101(c) ("Nothing in this part will be construed in any manner . . . [t]o preclude a State from employing techniques other than those specified in this part for purposes of . . . demonstrating the adequacy of a control strategy, provided that such other techniques are shown to be adequate and appropriate for such purposes.").

Appendix W refers the reader to EPA guidance for additional procedures for operating the model and interpreting results. 40 C.F.R. pt. 51, app. W § 6.2.1.a. See "Guideline for Regulatory Application of the Urban Airshed Model" (July 1991) ("1991 Modeling Guidance") (CR# 166) [JA XX].[24/] Although EPA's 1991 Modeling Guidance suggested that States perform "iterative" modeling until the model shows attainment, EPA updated its guidance in 1996 and expressly superseded its earlier recommendation that the model show no exceedances of the

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whereas the modeled reductions in NOx and VOC emissions were 26% and 32%, respectively. TSD at 37-38 and 21, Table III.F-1 [JA XX, XX]. Thus, there is no proportional relationship between the reduction in emissions and the reduction in ozone concentration.

[24/] Petitioner refers to the 1991 Guidance as a "Regulatory Guideline." Pet'r Br. at 30. For reasons described below, this moniker is confusing because it incorrectly suggests that the document is a legislative rule, rather than guidance.

ozone standard.[25/] "Guidance on the Use of Modeled Results to Demonstrate Attainment of the Ozone NAAQS" (June, 1996) ("1996 Guidance") (CR#234) [JA XX]. The 1996 Guidance introduced weight-of-evidence analysis, allowing consideration of additional analyses to interpret the model results.

Petitioner attempts to avoid the persuasive effect of the 1996 Guidance by arguing that the 1996 Guidance is altogether invalid because it was not adopted through notice-and-comment rulemaking procedures. Pet'r Br. at 30-32. Petitioner contends that formal rulemaking procedures were required because the 1996 Guidance changed the 1991 Guidance, which Petitioner characterizes as a rule. Id. As a result of this alleged procedural defect, according to Petitioner, the requirement of iterative modeling from the 1991 Guidance remains in effect. Id.

The flaw in Petitioner's reasoning lies in its initial premise that the 1991 Guidance constitutes a "rule" because, according to Petitioner, it is incorporated by reference in appendix W. Pet'r Br. at 30. On the contrary, appendix W merely provides that "[u]sers are also *referred to* the 'Guideline for Regulatory Application

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[25/] Petitioner relies primarily on Section 6.4 of the 1991 Modeling Guidance, which recommended that States perform iterative modeling until the model demonstrated attainment of the NAAQS for all days in the modeled episode. Pet'r Br. at 27. The 1996 Modeling Guidance states that "guidance described in Section 6.4 of the [1991 Modeling Guidance] is superseded." 1996 Modeling Guidance, 1 [JA XX].

of the Urban Airshed Model' for additional data requirements and procedures for operating this model." 40 C.F.R. pt. 51, App. W § 6.2.1.a. (emphasis added). Nothing in the text of appendix W suggests that the 1991 Guidance was incorporated by reference. When an agency intends to incorporate guidance into its regulations by reference, it must do so explicitly. PPG Ind., Inc. v. Costle, 659 F.2d 1239, 1250 (D.C. Cir. 1981) ("If a required definition or procedure is part of a rule, it must be published or incorporated by reference in the Federal Register, 5 U.S.C. § 552(a)(1)(D) (1976)."). For example, the Guideline on Air Quality Models, prior to its codification at 40 C.F.R. pt. 51, app. W in 1993, was initially incorporated by reference into the prevention of significant deterioration regulations:

> All estimates of ambient concentrations required under this section shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models" . . . . This document is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file in the Federal Register Library.

40 C.F.R. § 52.21(*l*)(1) (1984) (emphasis added); see also Connecticut, 696 F.2d at 158 (Guideline on Air Quality Models was incorporated by reference into 40 C.F.R. § 51.24(k)); Citizens Against the Refinery's Effects, Inc. v. EPA, 643 F.2d 178, 180 (4th Cir. 1981) ("After public comments were solicited, this modeling guidance was incorporated by reference into the regulations.") In contrast, appendix W lacks a

similarly clear expression of intent to incorporate the 1991 Guidance by reference.

Thus, there is no merit to Petitioner's contention that the 1991 Guidance is a rule, or that the 1996 Guidance failed to amend the 1991 Guidance. Since the 1991 Guidance is not part of EPA's regulations at 40 C.F.R. pt. 51, appendix W, it is not subject to the provision in Appendix W that "[a]ll changes to the Guideline [on Air Quality Models] must follow rulemaking requirements since the Guideline is codified in this appendix W of part 51." 40 C.F.R. pt. 51, app. W § 1.0(g). EPA's 1996 Guidance did not change the Guideline at appendix W, but did amend the 1991 Guidance by superseding the guidance's recommendation of iterative modeling and allowing weight-of-evidence analyses. Accordingly, Petitioner's argument that the D.C. Area must demonstrate attainment by performing iterative modeling cannot be sustained.

3. EPA's Weight-of-Evidence Analysis Was a Reasonable Exercise of Discretion and Is Supported by the Record.

Petitioner further claims that EPA's decision to use a weight-of-evidence analysis for the D.C. Area's attainment demonstration was arbitrary and capricious because (1) there was not sufficient uncertainty in the model to justify the supplemental analysis, Pet'r Br. at 33-35, and (2) the weight-of-evidence approach has never been tested against real-world conditions, id. at 35-36. Neither of these

arguments has merit. As the following discussion demonstrates, EPA's decision to supplement the photochemical grid modeling results with weight-of-evidence analyses was reasonable and is supported by the record.

a. EPA's Guidance and Uncertainties in the Model Warranted the Use of Supplemental Analysis.

In arguing that there is not sufficient uncertainty in the model results to justify the weight-of-evidence analysis, Petitioner misapprehends both the Guidance and the model. Contrary to Petitioner's suggestion, nothing in the Guidance limits the applicability of weight-of-evidence determinations to situations involving a small deviation from the NAAQS. Rather, the Guidance suggests a sliding scale for applying weight-of-evidence analysis. "Generally, the closer results come to meeting the test's benchmark, the less compelling other evidence supporting a deviation from the benchmark needs to be." 1996 Modeling Guidance at 27 [JA XX]. Thus, while the extent of deviation is associated with the burden of proof when resorting to weight-of-evidence methods, a deviation that is more than minor does not suggest that weight-of-evidence analyses cannot be used. Id. at 26, 39 [JA XX, XX]. Petitioner's contrary interpretation should be rejected because it reads into EPA's Guidance a limitation that does not exist.

Even assuming the correctness of Petitioner's interpretation, however, there

was ample basis for EPA to employ a weight-of-evidence analysis in this case. The model predicted attainment on two out of the three baseline dates, even without the weight-of-evidence analysis. Moreover, there is significant uncertainty in the model in two significant respects that warranted the supplemental analysis.

First, the model over-predicted future ozone concentrations by an average of approximately 20%. This was evident by comparing the model *predictions* of base year levels to the *actual monitored* results for those years. TSD at 20-21 [JA XX]; TSD Amendment at 5, Table IV.G-1 [JA XX]. EPA explored the possible reasons for the over-prediction of peak levels and took steps to interpret the modeled results in a rational manner. TSD at 41 [JA XX]. EPA's actions were specifically contemplated by the regulations at appendix W, which recognize that, while models "have become a primary analytical tool in most air quality assessments," "[a]ir quality measurements . . . can be used in a complementary manner to dispersion models, with due regard for the strengths and weaknesses of both analysis techniques. Measurements are particularly useful in assessing the accuracy of model estimates." 40 C.F.R. pt. 51, app. W § 1.0.b (emphasis added). Similarly, EPA's 1996 Guidance specifically contemplates that model results be supplemented with other analyses where a model shows over-prediction. 1996 Guidance at 32 [JA XX]. Here, the incongruous result of the model's peak predictions exceeding the

actual ozone measurements in the base year by an average of 20% gave rise to an obligation to assess the utility of the model's predictions. Small Refiner, 705 F.2d at 535 (although EPA has "undoubted power to use predictive models," the court would "also look for evidence that the agency is conscious of the limits of the model") (citation omitted)); see also Sierra Club , 657 F.2d at 334 ("We are in fact reassured by EPA's own consciousness of the limits of its model . . . ."); Chemical Mfrs.' Ass'n, 28 F.3d at 1265 ("[T]he more inflexibly the agency intends to apply the model, . . . the more searchingly will the court review the agency's response when an affected party presents specific detailed evidence of a poor fit between the agency's model and that party's reality.").

Second, there was a significant bias in the meteorological data used in the model, as one of the dates used was a particularly severe event (the 13th highest ozone-forming day in 46 years), and those conditions are not likely to recur frequently enough to have a significant impact on the air quality in the area. TSD at 37 [JA XX]; 68 Fed. Reg. at 19,114/3 [JA XX]. The predictions based on more representative meteorological data, which were still conducive to high ozone-forming conditions, demonstrated attainment.

Both of these uncertainties in the model - - the over-prediction and the bias in meteorological conditions - - were minimized by the weight-of-evidence

analysis. First, by determining design value based on the average of three three-year periods of actual measured ozone concentrations, the analysis effectively adjusts for the rarity of the high ozone-producing meteorological conditions of July 20, 1991. This is consistent with the Cox-Chu data, that indicates such meteorological conditions would not occur more than once in any three-year period. Second, by applying the RRF to the average of the actual measured design value, the analysis focused on the *relative* reductions in ozone predicted by the model, thereby avoiding the need to assess and adjust for the model's over-prediction of *absolute* future values. The model is more accurate in predicting relative change than in predicting absolute values because the simplifying assumptions that the model incorporates tend to cancel each other out in predicting relative change. It was thus reasonable for EPA to consider the design value predictions, and to give it considerable weight, in the weight-of-evidence analysis.

b. <u>The Weight of Evidence Analysis Is Used to Interpret the Model Results More Reliably.</u>

Petitioner's contention that the weight-of-evidence analysis is arbitrary and capricious because it has never been tested against or shown to accurately simulate

real world conditions (Pet'r Br. at 35) misses the point of the weight-of-evidence assessment. Weight-of-evidence is not based on different data that purports to accurately replicate real world conditions. Rather, weight-of-evidence is a different analytical interpretation of the same data. It is used to make model results more reliable than they are standing alone.[26/] Here, the model over-predicted ozone conditions in the base year and over-weighted a single data point in the base year. EPA reasonably determined the RRF analysis was needed to improve confidence in the model's performance.

As EPA's guidance recognizes, "a major (perhaps the major) source of uncertainty arises from projecting future events over long periods of time." 1996 Modeling Guidance, 40 [JA XX]. And as this Court has recognized, "[t]here must be a rational connection between the factual inputs, modeling assumptions, modeling results and conclusions drawn from these results.") Sierra Club, 657 F.2d at 333 (emphasis added). "The Administrator may apply his expertise to draw conclusions from suspected, but not completely substantiated, relationships between facts, from trends among facts, from theoretical projections from imperfect data,

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[26/] Contrary to Petitioner's suggestion, Pet'r Br. at 36, EPA has also applied weight-of-evidence analysis in cases where the attainment demonstration showed attainment of the ozone NAAQS through the statistical approach. See 67 Fed. Reg. 5170, 5177/2 (Feb. 4, 2002) [JA XX].

from probative preliminary data not yet certifiable as 'fact,' and the like." NRDC v. Thomas, 805 F.2d 410, 432 n.37 (D.C. Cir. 1986). Here, EPA did precisely that. The weight-of-evidence approach represented a rational method of interpreting the D.C. Area's modeling results based on "theoretical projections from imperfect data." Id. Accordingly, EPA's decision to consider weight-of-evidence in the D.C. Area's attainment demonstration should be upheld as a reasonable exercise of its delegated authority. See Connecticut, 696 F.2d at 159 ("To reject the EPA's conclusion under these circumstances would be to substitute our judgment concerning mathematical modeling techniques for that of the Agency. . . . This we cannot do.").

C. EPA's Determination that the D.C. Area SIP Demonstrated Timely Attainment Based on Modeled Predictions of Air Quality in 2005 Was Reasonable and Consistent with the CAA.

In Petitioner's final challenge to EPA's conditional approval of the attainment demonstration, Petitioner claims that EPA's reliance on modeling results for 2005, rather than 2003-2005, constitutes a failure to demonstrate attainment. Pet'r Br. at 36. Contrary to Petitioner's argument, EPA's determination that the D.C. Area's SIP provided for timely attainment of the NAAQS is reasonable and consistent with Subpart 2 of the CAA as a whole. 42 U.S.C. §§ 7511-7511f.

First, there is no requirement that the attainment demonstration be based on a

three-year period. That requirement applies to the actual attainment determination, which is based on observed and measured data recorded by the monitors. EPA's regulations, promulgated in 1979, provide that an area must furnish three years of monitoring data with an average of no more than one exceedance per year in order to be deemed in attainment of the ozone standard. 40 C.F.R. § 50.9 and app. H. The attainment demonstration, by contrast, is to be based on *predicted* ozone concentrations in a future year, and does not require the three-year average.

The gap between the attainment deadline (2005) and the attainment test (three years) was bridged by Congress in the 1990 amendments to the CAA, which made it clear that the three-year attainment test is from the attainment year forward (2005-2007), not from the attainment year backward (2003-2005) as Petitioner suggests. Congress, aware of EPA's requirement of three years of data to determine attainment, explicitly delegated EPA the authority to grant a State up to two one-year extensions of the attainment deadline if the State meets certain criteria in the attainment year. Section 181(a)(5) provides:

> Upon application by any State, the Administrator may extend for 1 additional year (hereinafter referred to as the "Extension Year") the date specified in table 1 of paragraph (1) of this subsection if -
> (A) the State has complied with all requirements and commitments pertaining to the area in the applicable implementation plan, and
> (B) no more than 1 exceedance of the national ambient air quality standard level for ozone has occurred in the area in the year preceding

the Extension Year.
No more than 2 one-year extensions may be issued under this paragraph for a single nonattainment area.

42 U.S.C. § 7511(a)(5). This carefully circumscribed grace period harmonizes EPA's procedures for determining whether an area has attained the NAAQS with the reality that a State's entire control strategy may not be fully implemented three years *prior* to the deadline. The two conditions required for the extension establish that the State is on track for attainment. It must be in compliance with the SIP, and it must have no more than one exceedance at any monitor (which is consistent with attainment, as the area can have an average of one exceedance per year over the three-year period and still be in attainment). This extension provision is an integral part of the statutory scheme and must be construed in conjunction with attainment deadline.

Other CAA provisions indicate that Congress could not have assumed that attainment demonstrations would be based on modeling of the attainment year and the preceding two years. For example, the CAA requires each State to show that its SIP will result in emission reductions equal to "at least 3 percent of baseline emissions <u>each year</u>" "until the attainment date." 42 U.S.C. § 7511a(c)(2)(B)(i). This "reasonable further progress" requirement shows that Congress expected States to reduce emissions continuously up to the attainment date.

Finally, EPA reasonably concluded that it would be impracticable to require States to model ozone conditions for three years, as Petitioner suggests.[27/] A State would need to compile data for each of the three years, perform quality assurance tests of the data, and conduct numerous additional model runs. This would be time-consuming and expensive. See 1991 Guidance §3.7 [JA XX] ("Developing photochemical model emission input data is the most intensive task of model applications, and [involves] many issues."). EPA's decision to approve the attainment demonstration based on the States' modeling of air quality only for the attainment year reflected a reasoned decision to "balance the cost and complexity of a more elaborate model against the oversimplification of a simpler model." Small Refiner, 705 F.2d at 535. Thus, Petitioner's objection to EPA's requirement of only one year of modeling cannot be sustained.

III. EPA'S CONDITIONAL APPROVAL OF THE 1999 ROP PLAN FOR THE D.C. AREA WAS REASONABLE AND CONSISTENT WITH THE CAA AND EPA'S MODELING GUIDANCE.

[27/] Moreover, modeling of post-attainment years would add little value. That is because the model does not know what year is being modeled. It only calculates the ozone concentrations based on the meteorological data and emissions data provided. The meteorological data is the same for every year in the future, as it is based on historical data. Because the control strategy in the D.C. Area is to be fully implemented by the attainment year, predictions for future years would be based on the same or similar emissions data.

Petitioner challenges the conditional approval of the 1996-99 ROP plan on grounds that it is based on the "MOBILE5" model rather than the "MOBILE6" model. These are EPA computer models used to determine the baseline emissions inventory and to model future emission reductions as a result of motor vehicle controls in order to determine if the required 9% reduction is obtained in the three-year period. The model is continually updated and revised as new data becomes available. As the name suggests, MOBILE5 is the fifth generation of the model, and MOBILE6 is the sixth generation of the model. MOBILE6 became effective January 29, 2002, and use of MOBILE6 for modeling was not permitted prior to that time. 67 Fed. Reg. 4254 (Jan. 29, 2002) [JA XX]. The 1999 ROP plan was submitted by the States in 1999, well before MOBILE6 was available for use.

The CAA and regulations require that SIP inventories and control measures be based on the most current information available and applicable at the time the SIP is developed. 42 U.S.C. § 7502(c)(3); 40 C.F.R. § 51.112(a)(1). Similarly, EPA's guidance on use of models requires that any new SIP modeling should be conducted with the new model. However, EPA does not generally require states to re-model emissions that have already been modeled with MOBILE5. See, Policy Guidance on the Use of MOBILE6 for SIP Development and Transportation

Conformity." (Jan. 18, 2002) [JA XX]: "EPA believes that the CAA would not require states that have already submitted SIPs or will submit SIPs shortly after MOBILE6's release to revise these SIPs because a new motor vehicle emissions model is now available." The same concept was confirmed in the Notice of Availability that announced the approval and availability of the MOBILE6 model for SIP development. 67 Fed. Reg. 4254 [JA XX].

The D.C. Area SIP was submitted to EPA in February, 2002 - less than a month after the MOBILE6 became available. The modeling had been completed prior to the SIP submission, based on MOBILE5. EPA reasonably concluded, consistent with its interpretation of the Act and its regulations and in accordance with its guidance, that it was not necessary for the States to revise the ROP SIPs to reflect the later MOBILE6 computer model.[28/] Of course, the States have committed to conduct modeling for post-1999 ROP plans, and those future ROP

[28/] EPA has required states to revise both attainment demonstration and ROP SIPs based on MOBILE5 when the SIPs relied on benefits from the Tier 2 motor vehicle standards because MOBILE5 could not accurately reflect such reductions. See, Memorandum, "1-hour Ozone Attainment Demonstrations and Tier 2/Sulfur Rulemaking" (Nov. 8, 1999) [JA XX]. The D.C. Area ROP plan for 1996-1999 did not take credit for the benefits from the Tier 2 motor vehicle standards, thus the guidance requiring remodeling with MOBILE6 is not applicable. However, because the D.C. Area attainment demonstration SIPs did take credit for Tier 2 reductions, the conditional approval requires that the States submit a revised attainment demonstration using the MOBILE6 model, which the States have committed to do.

demonstrations must be based on MOBILE6.

IV. EPA PROPERLY ALLOWED THE STATES REASONABLE TIME TO SUBMIT REVISED SIPS AND POST-1999 ROP PLANS AFTER BEING RECLASSIFIED FROM SERIOUS TO SEVERE.

By final action on January 24, 2003, EPA reclassified the D.C. Area from "serious" nonattainment to "severe" nonattainment. The reclassification required that the D.C. Area revise its SIPs to comply with the additional requirements applicable to severe areas. 42 U.S.C. § 7511(b)(2). Further, because the reclassification also extended the attainment deadline from 1999 to 2005, the D.C. Area became obligated to submit ROP plans for the 2000-2002 period and the 2003-2005 period. Id. at § 7511a(c)(2)(B). However, at the time of the reclassification, the statutory dates for submission of severe area SIPs, and the 2002 ROP plan, had already passed. Accordingly, EPA allowed the States a reasonable time - until March 1, 2004 - to submit the revised SIPs.

Petitioner argues that EPA does not have authority to extend the SIP submittal date beyond the statutory date for the original SIP submittals which, for the severe area, was November 15, 1994. However, the Act expressly provides EPA the authority to adjust the SIP submittal deadlines following reclassification:

> Each State containing an ozone nonattainment area reclassified under section 7511(b)(2) of this title shall meet such requirements of

> subsections (b) through (d) of this section as may be applicable to the area as reclassified, according to the schedule prescribed in connection with such requirements, except that *the Administrator may adjust any applicable deadlines (other than attainment dates) to the extent such adjustment is necessary or appropriate to assure consistency among the required submissions.*

42 U.S.C. § 7511a(i) (emphasis added).[29/]

EPA reasonably interprets that provision as applicable to a reclassification that requires SIP revisions to meet the newly imposed requirements, when the original submission date has already passed. EPA has consistently applied this interpretation in reclassification rulemakings. See, e.g., 62 Fed. Reg. 65,025 (Dec. 10, 1997) (Santa Barbara, Cal.), 62 Fed. Reg. 60,001 (Nov. 6, 1997) (Phoenix, Ariz.), 63 Fed. Reg. 8128 (Feb. 18, 1998) (Dallas-Fort Worth, Tex.) [JA XX, XX, XX, XX]. See Good Samaritan Hosp. v. Shalala, 508 U.S. 402, 417 (1993) ("[T]he consistency of an agency's position is a factor in assessing the weight that position is due").

Petitioner urges a retroactive application of the CAA, which would hold the States in default of SIP submission obligations, even before the obligations are triggered by the reclassification. By Petitioner's analysis, the D.C. Area was

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[29/] The statute does not provide a deadline for submission of revised SIPs after reclassification. EPA reasonably determined that a period of 18 months was appropriate, because CAA section 110(k)(5), 42 U.S.C. § 7410(k)(5), allows States up to 18 months to submit a SIP revision after a SIP call notice.

required to submit SIPs containing the severe area requirements more than eight years *before* it was reclassified as severe. Not only is Petitioner's interpretation patently unfair, but it would also be inconsistent with the Administrative Procedure Act, 5 U.S.C. 553(d), which requires that persons affected by a rule must have advance notice of the rule's requirements before the rule takes effect. Georgetown Univ. Hosp. v. Bowen, 821 F.2d 750, 756-58 & n.11 (D.C. Cir. 1987).

This is not the first time Sierra Club has tried to turn back the hands of time to require compliance with a deadline already passed. In Sierra Club v. Browner, 130 F. Supp. 2d 78 (D.D.C. 2001), the Sierra Club advanced the same argument that it is urging here - that the reclassified area should be required to comply with the original SIP submittal deadlines for the new classification, even though the deadlines had passed prior to the reclassification.[30/] The argument was rejected by the District Court and this Court affirmed, with the following observation:

> Although EPA failed to make the nonattainment determination within the statutory time frame, Sierra Club's proposed solution only makes

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[30/] The case involved reclassification of the St. Louis nonattainment area. When the area failed to meet its attainment deadline, Sierra Club sought a ruling that EPA was required to "bump-up" the area as a matter of law to the next highest classification and, because the bump-up would require the area to submit revised SIPs to reflect the new classification, the Sierra Club also sought a declaration that the SIP revisions for the reclassification were too late because "the State of Missouri has failed to file a SIP revision that comports with the requirements of section 7511a(c) by the statutory deadline of May 15, 1998". Id. at 87.

> the situation worse. Retroactive relief would likely impose large costs on the States, which would face fines and suits for not implementing air pollution prevention plans in 1997, even though they were not on notice at the time.

Sierra Club v. Whitman, 285 F.3d 63, 68 (D.C. Cir. 2002).

Petitioner's complaint that the ROP plan for 1999-2002 will not be submitted until after the milestone date of 2002 has passed also ignores the fact that the D.C. Area was not subject to those requirements until the effective date of its reclassification - long after the statutory date had passed. The States were not subject to the post-1999 ROP requirement until the attainment date was extended to 2005 by the reclassification.[31/] At the time of reclassification, the date for submittal of the ROP plan, and the date for demonstrating achievement of the 2002 milestone, had already passed. It was therefore reasonable for EPA to require the States to meet the milestone as expeditiously as practicable after November 15, 2002 (the milestone date), but not later than the attainment date. This standard has been consistently used by EPA when it is required to establish new ROP deadlines for

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[31/] Petitioner argues that post-1999 ROP plans were required even before the reclassification, citing Sierra Club I. Pet'r Br. at 46. Petitioner's assertion takes the Sierra Club I case out of context. In that case, EPA had approved an extension of the attainment date until 2005 and the Court held that "with an attainment date of 2005" the States would be required to submit post-1999 ROP plans. The Approval was then vacated by this Court, leaving the attainment date at 1999 (with no post-1999 ROP plans required) until the reclassification.

compliance with already passed ROP milestone dates. See, e.g., 65 Fed. Reg. 31,485 (May 18, 2000), 63 Fed Reg. 28,898 (May 27, 1998), 62 Fed. Reg. 31,343 (June 9, 1997) [JA XX, XX, XX].[32/]

Petitioner not only asks this Court to vacate EPA's conditional approval, but also to remand the matter with specific instructions to EPA to disapprove the challenged SIPs. Petitioner overreaches. If the conditional approval is vacated by this Court, EPA's final action of January 24, 2003 would permit the States until March 1, 2004 to submit revised SIPs. If that action is vacated by the Court, the proper remedy is to remand to EPA with instructions to undertake further rulemaking consistent with the Court's decision, reserving to EPA the appropriate action to be taken. As noted by this Court in Sierra Club v. Whitman, 285 F.3d at 68, "Sierra Club's proposed solution would only make the situation worse."

[32/] Petitioner's assertion that CAA section 182(c)(2)(B)(ii), 42 U.S.C. § 7511a(c)(2)(B)(ii), provides the only alternative for a missed ROP milestone is misplaced. That section provides the process when a State is unable to achieve the required 9% reductions. The D.C. Area is not being excused from the 9% reduction requirement, it is simply being allowed additional time to show that the required reductions have been achieved because of the late application of these requirements to the Area.

CONCLUSION

For the forgoing reasons, the petition for review should be denied.

Respectfully Submitted,

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